Application No.: 09/895,425

Amendment Date: August 6, 2003

Reply to Office Action of: May 8, 2003

## **REMARKS**

Reconsideration of the above-identified application in view of these remarks is respectfully requested. Claims 1-11 are pending in the present application.

## **The Office Action**

Claims 1, 2, 4, 6, 9 and 10 stand rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,084,939 issued to Tamura. Claim 3 stands rejected under 35 U.S.C. §103 as being unpatentable over Tamura in view of U.S. Patent No. 5,459,769 issued to Brown. Claims 5,7,8 and 11 stand rejected under 35 U.S.C. §103 as being unpatentable over Tamura.

## The §102 Rejections

Under 35 U.S.C. §102, anticipation requires that each and every element of the claimed invention be disclosed in the prior art. . . . In addition, the prior art reference must be enabling, thus placing the allegedly disclosed matter in the possession of the public. *Akzo N.V. v. United States International Trade Commission*, 1 USPQ 2d 1241, 1245 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909 (1987). Furthermore, not only must each and every element be disclosed in the prior art reference, "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). These same principles are clearly recited in M.P.E.P §2131.

Turning now to the rejection of **claim 1**, contrary to the Examiner's statement that all elements are disclosed in the Tamura reference, there is no disclosure of a number of the elements. Specifically, Tamura discloses an x-ray system for producing 2 dimensional single exposure planar images acquired in a very short instant of system operation. In contrast, claim 1 recites, in part, a camera system controller, responsive to study parameters, which acts to control the camera to perform a desired nuclear study. Frankly, an x-ray system controller, as disclosed in Tamura, simply does not disclose a controller that

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functions to perform a nuclear study according to the parameters used to control a gamma camera. A nuclear study is entirely different than an x-ray snapshot. The controllers, parameters and processes are simply different. The Tamura reference does not place the subject matter of the presently claimed invention in possession of the public and is not enabling.

In addition, in contrast to the Examiner's assertion, the Tamura reference does not indicate that the rather instantaneous snapshot operation of the x-ray system discloses the capability of allowing user input for changing any parameters whatsoever <u>during the operation</u> of the x-ray tube to create an image. The section of text referred to by the Examiner simply does not disclose nuclear study parameters nor does it disclose the ability of the user modifying nuclear study parameters during the image data acquisition process. Tamura indicates x-ray parameters that are initially set to energize an x-ray tube to obtain the x-ray snapshot. This is not a disclosure of the ability to have any modification of the original x-ray tube operating parameters at any time let alone have a user modify a nuclear study parameter <u>during the execution</u> of the nuclear study. The operating time of an x-ray system is simply not analogous to that of a nuclear study. For at least these reasons, it is respectfully suggested that the rejection is unsupported by the cited reference and is therefore improper. Withdrawal of the rejection and allowance of claim 1 is respectfully requested.

Claim 2 depends from claim 1 and the rejection of claim 2 is improper for at least the same reasons as for claim 1. In addition, there is no disclosure of a controller adapted to allow a user to modify the conduct of the nuclear study while the detector is acquiring scintillation event data. In Claim 4, which also depends from claim 1, the rejection is improper for at least the same reasons as for claim 1. In addition, there is no disclosure of a controller adapted to allow a user to modify any parameter let alone the specific parameter of the time of event acquisition during conduct of the nuclear study. The simple mention that irradiation time for an x-ray image is an initially set parameter for acquiring an x-ray snapshot does not disclose modifying the event data acquisition parameter

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prior to completion of a nuclear study. **Claim 6** depends from claim 1 and the rejection is improper for at least the same reason as well as the fact that claim 6 recites that the count criterion is the nuclear study parameter that is able to be modified by the user <u>during</u> the <u>nuclear</u> study. There is no disclosure in Tamura of a controller adapted to allow a user to modify any parameter let alone the specific parameter of the count criterion for data acceptance during conduct of the nuclear study. It is respectfully suggested that these rejections are improper as not supported by the disclosure in the cited reference. Withdrawal of the rejections and allowance of claims 2, 4, and 6 is respectfully requested.

Claim 9 recites, in part, prior to the conclusion of the <u>nuclear study</u>, commanding the gamma camera to complete the study in accordance with a modified parameter. There is no indication in Tamura of modifying nuclear study parameters prior to completion of the study. For reasons similar to those described above with respect to the apparatus of claim 1, it is respectfully suggested that this element of claim 9 is simply not disclosed in the Tamura reference and that the rejection is not supported by the reference and is improper. Withdrawal of the rejection and allowance of claim 9 is respectfully requested.

Claim 10 depends from claim 9 and the rejection is improper for at least the same reasons as discussed with respect to claim 9. In addition, Tamura does not disclose at least one modification of the listed nuclear study parameters prior to completion of the study. As such, the rejection is not supported by the cited reference and is improper. Withdrawal of the rejection and allowance of claim 10 is respectfully requested.

## The §103 Rejections

Regarding **claim 3**, as described above Tamura does not disclose the limitations as set forth in claim 1 and does not therefore disclose, teach or suggest the elements of claim 1. In addition, it is respectfully suggested that the gantry for the computed tomography system of Brown that supports the rapidly rotating x-ray tube and housing around an imaging region during a CT scan is not

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analogous art for suitable combination. The gantry for the CT system hold the rapidly rotating x-ray tube and detector assemblies in alignment during the image data acquisition. Rotation rates around the imaging region of up to twice per second are not uncommon. As such, there are many full rotations around the imaging region during a CT scan. In contrast, a nuclear gantry precisely positions, at a substantially dissimilar and different rate of movement, the gamma camera heads throughout the nuclear study. In common clinical application the positioning of the gamma camera heads may only include 180° to 360° of angular movement of a particular head during the entire scan. Brown may indicate a conventional CT gantry, it does not indicate a conventional nuclear camera gantry.

Concerning **claim 5**, there is no disclosure, teaching or suggestion in Tamura of a controller adapted to allow a user to modify any parameter let alone the specific parameter of the number of frames acquired during conduct of the nuclear study. It is respectfully suggested that the rejection is improper as not supported by the disclosure in the cited reference.

In addition, regarding claims 3 and 5, the statements by the Examiner that Tamura does not explicitly exclude or limit a feature claimed in the present invention is not the proper standard for patentability. Failure of the reference to say anything specific about a component is not grounds for a proper rejection. There are many things not stated in many references. The failure of Tamura to specifically exclude something does not make that non-excluded (non-disclosed) feature obvious in the claimed subject matter of the present invention. The reference must expressly or inherently disclose, teach or suggest the claim element. As such, the rejections of claims 3 and 5 are improper and it is respectfully requested that the rejection be withdrawn and claims 3 and 5 be allowed.

Regarding **claims 7, 8, and 11**, which depend from either claims 1 and 9, Tamura does not, as discussed above, disclose the elements of claim 1 and claim 9. In addition, with respect to **claim 7** there is no disclosure of stages of a

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nuclear study in Tamura. Tamura does not disclose a system that enables the operator to modify parameters <u>during the nuclear study</u>. In addition, the Examiner states that changes "would take effect immediately" in the Tamura reference. The invention of claim 7 is not limited to immediate modification of the parameters, only that that the parameter is modified for a stage of the study which has not yet been executed. This is not necessarily limited to immediately taking effect as suggested by the Examiner. **Claim 8** recites, in part, that the controller is responsive to the modification of the study parameter *to ascertain whether the modified parameter can be prospectively utilized* (emphasis added). There is simply no disclosure, teaching or suggestion in Tamura that the controller has the ability to analyze any modified parameter for prospective use. As such the rejections of claims 7, 8 and 11 are improper. Withdrawal of the rejections and allowance of the claims is respectfully solicited.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Accordingly, allowance of the application is respectfully requested. Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 14-1270.

Respectfully submitted,

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**Enclosures**